

## University of Groningen

### Happiness and capability

van Hoorn, A.A.J.; Mabsout, R.; Sent, E.M.

*Published in:*  
Journal of Socio-Economics

*DOI:*  
[10.1016/j.socec.2009.10.013](https://doi.org/10.1016/j.socec.2009.10.013)

**IMPORTANT NOTE:** You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

*Document Version*  
Final author's version (accepted by publisher, after peer review)

*Publication date:*  
2010

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

van Hoorn, A. A. J., Mabsout, R., & Sent, E. M. (2010). Happiness and capability: Introduction to the Symposium. *Journal of Socio-Economics*, 39(3), 339-343. <https://doi.org/10.1016/j.socec.2009.10.013>

**Copyright**

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

**Take-down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

## Accepted Manuscript

Title: Happiness & Capability: Introduction to the Symposium

Authors: André van Hoorn, Ramzi Mabsout, Esther-Mirjam Sent

PII: S1053-5357(09)00141-3  
DOI: doi:10.1016/j.socec.2009.10.013  
Reference: SOCECO 932

To appear in: *The Journal of Socio-Economics*

Received date: 14-9-2009  
Accepted date: 26-10-2009



Please cite this article as: van Hoorn, A., Mabsout, R., Sent, E.-M., Happiness & Capability: Introduction to the Symposium, *Journal of Socio-Economics* (2008), doi:10.1016/j.socec.2009.10.013

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

# Happiness & Capability:

## Introduction to the Symposium

André van Hoorn, Ramzi Mabsout & Esther-Mirjam Sent\*

*Radboud University Nijmegen*

*Department of Economics*

### **Abstract**

The aim of this symposium is to move beyond the established, narrow measures of well-being. It does so by bringing together insights from the happiness approach and the capability approach, both of which are at the forefront of theorizing on welfare in economics. The reason is that the connection happiness-capability is extremely stimulating and potentially able of opening up a very promising field of research. For this purpose, the symposium consists of overview papers by leading scholars and practitioners and of papers dealing with key conceptual and empirical issues on the frontier of combined happiness and capability research.

JEL classification: A13, D60, I30, Z13

Keywords: happiness, capability, utility, welfare, well-being

---

\* Corresponding author, PO Box 9108, 6500 HK, Nijmegen, the Netherlands. Tel: +31 243 611 252,

Fax: +31 243 612 379, E-mail: E.M.Sent@fm.ru.nl.

## 1. INTRODUCTION

Sages going back to at least Socrates have offered advice on human well-being, but only now are scientists beginning to address this question with systematic, controlled research, while increasingly turning their attention towards an ever-widening range of measures of well-being. Economists, for instance, are exploring alternatives to the narrow focus on Pareto Optimality at the micro level and Gross Domestic Product at the macro level.

The aim of this symposium is to move beyond the established, narrow measures of well-being. As far back as 1934, Franklin D. Roosevelt said in a message to the U.S. Congress: “This seeking for a greater measure of welfare and happiness does not indicate a change in values. It is rather a return to values lost in the course of our economic development and expansion.” In the same year, one of the fathers of GDP, Simon Kuznets, famously said in his very first report to the same Congress: “the welfare of a nation can [...] scarcely be inferred from a measure of national income...” (Kuznets 1934, p. 7).

The symposium brings together two perspectives that seek a greater measure of well-being in the sense of Roosevelt, namely, the happiness approach and the capability approach. The reason is that the connection happiness-capability is extremely stimulating and potentially able of opening up a very promising field of research. On the one hand, the capability approach considers happiness as a good indicator of quality of life only if accompanied by a wide capability set. On the other hand, the happiness approach contains a variety of strands, one of which is fully consistent with the capability approach, namely the one focusing on intrinsic motivations, civic commitment, relationship status and quality, and personal growth as indicators of a happy life.

The symposium seeks to maintain a variety of insights on well-being for a rich, agenda-setting encounter. For this purpose, the symposium consists of overview papers by leading scholars and practitioners and of papers dealing with key conceptual and empirical issues on the frontier of combined happiness and capability research. By way of introduction, the next section briefly outlines happiness research, while section three briefly summarizes capability contributions. The subsequent section gives an overview of the papers included in the symposium.

## 2. HAPPINESS IN ECONOMICS

Economics has until recently developed in such a way that it excludes happiness, either as a motive underlying human behaviour or as a conceptual measure of well-being or welfare. In fact, precisely to avoid referring to (unobservable) subjective (mental) states like happiness, traditional economics has developed rational choice theory in which preferences and utility are the key constructs. In this theory, people rank preferences and higher ranked preferences are associated with a higher score on a utility index. Importantly, utility in this framework does not refer to something that is intrinsically good (although it is casually used in this way), and a utility function is only a way of ranking alternative choices or actions (e.g., Hausman and McPherson, 2006). Within the rational choice framework, welfare subsequently refers to the extent to which preferences are satisfied; the more satisfied one's preferences are, the higher is one's score on the utility index.

The recent inroad of happiness in economics, partly inspired by changes in psychology, appears both to complement the rational choice framework and to provide a (partial) alternative to it. In the 1950s, an important change occurred in psychology. Psychologists—until then mainly interested in negative emotional states such as depression and anxiety—started studying positive emotions and feelings of well-being (cf. Kahneman et al., 1999; Sirgy et al., 2006). More to the point, the field started measuring what is best referred to as subjective well-being (commonly abbreviated as SWB). SWB, though not the same as happiness in a strict sense, comprises several notions typically associated with happiness and the good life. Specifically, SWB is “a broad category of phenomena that includes people's emotional responses, domain satisfactions, and global judgements of life satisfaction” (Diener et al., 1999: 277).

A more economic interpretation of SWB or self-reported happiness is as measures of so-called “experienced utility” (cf. Alesina et al., 2004; Di Tella et al., 2001; Kahneman and Krueger, 2006; Rabin, 1998). Kahneman and his collaborators (e.g. Kahneman et al., 1997; Kahneman, 1999) distinguish between experienced utility, defined as “the hedonic quality” of an outcome, and decision utility, defined as the “weight of an outcome in a decision” (Kahneman et al., 1997: 375). Decision

utility here would fit the framework of rational choice theory, whilst experienced utility is associated more with happiness.

Importantly, measures of SWB or self-reported happiness are valid and reasonably reliable (see Diener et al., 1999, Kahneman and Krueger, 2006, Krueger and Schkade, 2008 and Nettle 2005 for further discussion). In addition, higher levels of SWB predict good outcomes such as diminished suicide risk and diminished general health risk, and an increasing chance of surviving coronary heart disease and other conditions, amongst others (Lyubomirsky et al., 2005). Hence, the scepticism economists traditionally seem to have of survey data (cf. Bertrand and Mullainathan, 2001; Dominitz and van Soest, 2008) may, in the case of SWB, be largely misplaced.

The most prominent feature of the recent happiness literature in economics, subsequently, is its empirical nature. Typically this research simply takes some sort of happiness measure as dependent variable in statistical analyses—particularly much researched are Easterlin's (1974) early, paradoxical findings that within countries a higher income is associated with more happiness, but that in developed countries a sustained increase in income does not lead to higher happiness (see Clark et al., 2008 for an overview).

This quantitative focus notwithstanding, neither the actual measurement of SWB nor the different conceptualizations of it that exist, particularly in psychology, receive much attention in economics. Angner's contribution to the symposium is an exception, which may ultimately prove helpful for better understanding the relation between SWB and various economic factors. He summarizes different concepts of SWB that can be found in the literature and proposes the idea of preference hedonism to integrate them. For the typical use of happiness data in economics—estimating the shape and content of the happiness or experienced utility function, in particular the economic factors underlying differences in SWB—this distinction does not yet seem relevant. However, as the field of happiness economics develops, the conceptualization of SWB is likely to become a more significant aspect in relation to the economic issues that are analyzed using happiness data; chief examples are the evaluation of policy issues (Gruber and Mullainathan, 2005), tests of economic theories (Frey and Stutzer, 2002), and the valuation of environmental externalities (Luechinger, 2009).

The happiness literature shares its interest in well-being with capability research, while the two appear to differ in the way they approach the issue.

### 3. CAPABILITY AND ECONOMICS

The capability approach assesses well-being or welfare in terms of the freedom, or capability, individuals have to experience and achieve valuable states and activities, so-called functionings. Since Sen's (1980) seminal Tanner Lecture, the capability approach has expanded from a narrow origin in political and moral philosophy to cross many disciplinary boundaries. Feminist economists (Peter, 2003; Robeyns, 2003; van Staveren and Gasper, 2003), ecological and environmental economists (de Vries and Petersen, 2009), development economists (UNDP, 1990), welfare economists (Basu and López-Calva, Forthcoming; Kuklys, 2005), labour economists (Burchardt, 2002), political philosophers (Anderson, 1999), and applied policy makers (Bonvin and Farvaque, 2005; Canoy et al., this symposium) use the capability approach to model and evaluate well-being.

The success of the capability approach appears especially due to its multidimensional informational space (Alkire, 2002; Comim, 2008; Gasper, 2007; Marin and Davis, 2007). That is, the approach seeks to harmonize the necessarily pluralistic foundation of well-being research under a single normative framework. Capability theorists in principle disagree with Griffin's (1987) view that, as a tool for well-being assessment, utilitarianism is able to reflect heterogeneity in different value systems. They also dispute, for the same reasons, Bruni et al.'s (2008: 8) contention that happiness research is as concerned as the capability approach with multiple values and methodological pluralism.

In its most basic conception, the capability approach is a normative structure that cannot be falsified or used for predictions. It predetermines a multidimensional space of evaluation that an evaluator can expand or narrow based on some prior established objective(s) (Sen, 1985a; Robeyns, 2005). Evaluation starts with the standard of living and moves on to more complex notions of well-being and agency (Sen, 1985b, 1987; Gasper, 2004: 29-33; Robeyns, 2005: 102-103). Well-being and agency achievements are assessed in the metrics of achieved functionings and achieved autonomy /

responsibility. Well-being and agency can be further evaluated in terms of freedom rather than achievements. The capability approach thus offers four fundamental spaces of evaluation, namely well-being achievement and well-being freedom, and agency achievement and agency freedom. These spaces of evaluation reflect the approach's value pluralism.

An additional key feature of the capability approach concerns its ethical individualism (Robeyns, 2000, 2005). That is, the objects of evaluations are the functionings and capabilities of individuals not structures or social wholes. The assessment of well-being and agency is therefore done under: (i) self-centred welfare; (ii) self-welfare goals; (iii) self-goal choice; and (iv) reasoning and self-scrutiny. Each of (i)-(iv) looks at the individual from a broader perspective. Element (i), self-centred welfare, depends only on own consumption and other features of the richness of own life (without any sympathy or antipathy towards others and without any procedural concern). It is closest to the notion of standard of living. Reasoning and self-scrutiny is the most comprehensive evaluative space and a prerequisite for autonomous well-being assessment. Individuals who can reason and scrutinise their goals are entrusted to evaluate their own well-being. There is an implicit hierarchy where the highest echelon is occupied by a reasoning rational agent able to commit to and hold objectives that possibly lie beyond own welfare and goals (Sen, 2005, 2006).

There is a variety of methodologies to specify further Sen's elementary and broad foundation. The so-called 'objective', open ended lists of valuable capabilities are most often utilised (Nussbaum, 2000; Robeyns, 2003; Alkire, 2002). Though capability lists share something with human rights, not all of them purport universal coverage or constitutional protection. Other scholars construct lists using empirical and philosophical methods as a way to avoid over-specifying the capability approach (Alkire and Black, 1997).

All these specification attempts nevertheless involve a "normative anchor" (Bruni et al., 2008) and an evaluator, who can be the individual self (Sen, 1985b). Ultimately, whether lists are the right way or the only way for the capability approach to develop is open to debate. Regardless, the furthering of the capability approach is necessary (a) to answer where the capability approach draws the limit for the assessor of well-being (Sugden, 2008); (b) to model and assess quality of life beyond a certain level of development in terms of functioning and capability (Pugno, 2008); and (c) to link



the capability of individuals to their embeddedness in institutions and structures (Jackson, 2005; Stewart, 2005; Deneulin, 2008).

To conclude, the capability approach is positioned as a generalized framework, encompassing resourcism and welfarism, without being reducible to any of them (Sen, 1998: 81-85). Capability theorists and practitioners avoid the full subjectivism of welfarism and the rationalism of Rawls (2001), whose universal primary goods do not depend on individuals' private good and their particular characteristics. In the procedural part of the capability approach the aim is for evaluation to fix the weights of functionings and capabilities. Setting weights, it should be noted, does not necessarily imply that different capabilities are commensurable. Capability lists, as argued above, are one way to fix weights. There is an explicit and recognized by all evaluative exercise in the capability approach involving reasoning and scrutiny at the individual level and public reasoning and debate at the societal level.

#### **4. THE SYMPOSIUM**

In different forms, the papers in the symposium deal with assessing and expanding the connections between happiness and capability. In the process, different themes emerge. The most prominent one concerns the interdependence between happiness and capability. At the conceptual level, this theme is featured in the papers by Veenhoven and Gasper. Their analyses offer alternative meta-frameworks for the integration of capability and happiness. Integration at the applied level focuses mostly on the subjectivity link and is taken up in the contributions by Castellani, Di Giovino & Novarese, Van Ootegem & Spillemaeckers, and Kotan. The first two of these draw on statistical and qualitative techniques to shed light on the relationship between happiness and capability; while the latter proposes a practical framework for the empirical integration of happiness and capability.

A secondary theme, partly extending the main one, concerns the application of happiness and capability research—separately or in combination—in public policy. The papers by Van Ootegem & Spillemaeckers and Canoy, Lerais & Schokkaert show how insights from different theories of well-

being, notably happiness and capability, can help the formulation of policy and the construction of measures by which policy outcomes may be judged.

#### 4.1 Conceptual connections

In their contributions to the symposium, Gasper and Veenhoven each introduce and defend their own meta-organisational frameworks. While they subsequently adopt divergent paths, their papers provide a roadmap of current well-being theories. Gasper explores how comparable, both theoretically and empirically, happiness and capability are. In contrast, Veenhoven relies on statistical analysis to uncover relationships between happiness, capability, and their determinants.

Both authors note that well-being is an umbrella concept. However, for Veenhoven (2000: 1), this is not useful because it has a too “broad overall meaning [...] unfeasible in measurement and decision making”. Gasper, in contrast, contends that this broadness serves a purpose because it contains irreducible multidimensional values and information. He warns that narrowing the scope of well-being research cannot be done without loss of value and information along the way. Depending on the objective at hand, the most costly loss is to be minimised. Well-being as such can never be wholly operationalised as a concept. Veenhoven is less interested in concepts as such; given sensible frameworks for happiness and capability, he explores which correlates they have in common.

Veenhoven accordingly provides an organising framework for happiness and capability theories. He finds that not all theories are desirable and selects a theory of capability inspired by Nussbaum and based on skills (inner quality and life chances), and of happiness as enduring and covering life as whole. The main part of his paper explores the different interrelationships between the happiness and capability literature. Assessing both individual-level and country-level relationships he finds that in most instances happiness and capability support each other in a substantial number of ways. The lack of relationship between happiness and education at the individual level worries him, however.

Gasper’s framework makes a further distinction between well-being and quality of life, arguing that both are multidimensional concepts that cannot be defined in unique, unambiguous ways. Gasper situates theories of well-being on six dimensions, namely, scope and focus, values, research

instruments, purposes, standpoints, and theoretical frameworks. He shows that although some overlap exists, most approaches are not comparable with each other because of the many dimensions involved. Reasoning from this, Gasper argues in favour of well-being as eudemonia rather than as happiness or hedonic SWB (cf. Angner's analysis of different conceptualizations of SWB in this symposium).

Kotan's paper adds to the issues raised by Veenhoven and Gasper by providing an explicit link between the capability approach and happiness research as welfare evaluation frameworks. The "linchpin" is provided by the notions of agency and functioning achievement. Kotan identifies two components as critical for the capability approach: functioning achievement and agency. Both constitute freedom or capability. When feasible, Kotan argues, agency evaluation should be given priority over achieved functioning. In this framework, happiness or SWB is an achieved functioning, a well-being signal with no specific source. SWB, then, is an empirical indicator of agency success.

## **4.2 Empirical investigations**

Kotan's framework provides a conceptual basis for empirical work that aims to integrate the two theories of well-being, happiness and capability.

Beyond establishing the foundations for integrative empirical work, the quantitative analyses by Castellani, Di Giovinazzo & Novarese actually push ahead with combining the two perspectives to shed light on possible determinants of well-being. Their paper connects Herbert Simon's insights on procedural rationality with Tibor Scitovsky's views on happiness. The key idea is that a procedural conception of rationality implies that aspirations are an important determinant of happiness. Castellani, Di Giovinazzo & Novarese illustrate this idea and the relevance of the established connection by means of a classroom experiment.

Van Ootegem & Spillemaeckers elaborate a framework for assessing well-being that does not rely on a single theoretical perspective. In light of the policy relevance of their insights, these are covered in the next subsection, though they also conduct an empirical investigation.

### 4.3 Policy applications

Van Ootegem & Spillemaeckers apply the qualitative methodology of using focus groups to understand well-being from the perspective of the capability approach. This focus group approach strikes a balance between perfectionist listing (Nussbaum) and open deliberative listing (Sen) of capabilities and functionings. The methodology allows the exploration of diverse opinions including the way people think about well-being. Van Ootegem & Spillemaeckers use a two steps procedure: *listing* (for identifying dimensions) and *weighting* (for aggregating dimensions). The focus groups define well-being in broader terms than life satisfaction or happiness. Van Ootegem & Spillemaeckers find that participants can reflect on their own well-being and that they understand the difference between opportunity and achievement. Indexing (or ranking) of eight (ex ante) well-being dimensions (work, education, leisure, social environment, physical environment and political environment, health and wealth) is done by participants using both individual ranking and focus group weights. These dimensions are the capabilities. Participants turn out to consider health the most important capability and political life the least important one. An ex-post, more deliberative list, which includes state of mind, making choices, values, responsibility and security, is constructed from the inputs of the focus groups and indexed as well.

Canoy, Lerais, & Schokkaert take the policy application of well-being research one step further. Their paper uses the capability approach to evaluate macro policy options ex-ante. The approach is to assess the impact of government action exclusively in terms of its effect on ultimate ends or well-being. Canoy, Lerais, & Schokkaert use Nussbaum's list as a starting point to ensure that the ex-ante policy assessment is relatively free from political manipulation. Notwithstanding the difficulties inherent to the capability approach, the authors find it provides a cogent framework for assessing policies at the macro level.

## 5. CLOSING

Together, the papers in the symposium demonstrate the range of issues in economics that can benefit from exploring the connection happiness-capability. They do so by establishing conceptual

connections, developing empirical investigations, and providing policy applications. In the process, insights are gained concerning greater measures of well-being than the traditional focus on Pareto Optimality or Gross Domestic Product. As such, the symposium sets the agenda for future research comparing and contrasting the happiness approach and the capability approach to conceptualizing welfare.

## REFERENCES

- Alesina, A., Di Tella, R., MacCulloch, R., 2004. Inequality and happiness: are Europeans and Americans different? *Journal of Public Economics* 88, 2009--2042.
- Agarwal, B., Humphries, J., Robeyns, I., 2003. Exploring the challenges of Amartya Sen's work and ideas: An introduction. *Feminist Economics* 9, 3--12.
- Alkire, S., 2002. *Valuing Freedoms. Sen's Capability Approach and Poverty Reduction*. Oxford University Press.
- Alkire, S., 2008. Using the capability approach: Prospective and evaluative analysis, in: Alkire, S., Qizilbash, M., Comim, F. (Eds.), *The Capability Approach*. Cambridge, pp. 26--50 .
- Alkire, S., Black, R., 1997. A practical reasoning theory of development ethics: Furthering the capability approach. *Journal of International Development* 9, 263--269.
- Anderson, E., 1999. What is the point of equality? *Ethics* 109, 287--337.
- Basu, K., López-Calva, L., Forthcoming. Functionings and capabilities, in: Arrow, K., Sen, A., Suzumura, K. (Eds.), *Handbook of Social Choice and Welfare*. North Holland.
- Bertrand, M., Mullainathan, S., 2001. Do People Mean What They Say? Implications for Subjective Survey Data. *American Economic Review, Papers and Proceedings* 91, 67--72.
- Bonvin, J--M., Fravaque, N., 2005. What informational basis for assessing job seekers?: Capabilities vs. Preferences. *Review of Social Economy* 63, 269--289.
- Bruni, L., Comim, F., Pugno, M., Eds., 2008. *Capabilities and Happiness*. Oxford.

- Burchardt, T., 2002. Constraint and opportunity: Women's employment in Britain. Paper presented at the conference on Promoting Women's Capabilities, Working paper, Cambridge, 9-10 September 2002.
- Clark, A.E., Frijters, P., Shields, M.A., 2008. Relative Income, Happiness and Utility: An Explanation for the Easterlin Paradox and Other Puzzles. *Journal of Economic Literature* 46, 95--144.
- Comim, F., 2008. Capabilities and happiness: Overcoming the informational apartheid in the assessment of well-being, in: Bruni, L., Comim, F., Pugno, M. (Eds.), *Capabilities and Happiness*. Oxford, pp.140 -159- .
- Deneulin, S., 2008. Beyond individual freedom and agency: structures of living together in the capability approach, in: Alkire, S., Qizilbash, M., Comim, F. (Eds.), *The Capability Approach*. Cambridge, pp. 140--160 .
- Di Tella, R., MacCulloch, R., Oswald, A., 2001. Preferences over Inflation and Unemployment: Evidence from Surveys of Happiness. *American Economic Review* 91, 335--341.
- Diener, E., Suh, E.-M., Lucas, R.E., Smith, H.L., 1999. Subjective Well-being: Three Decades of Progress. *Psychological Bulletin* 125, 276--302.
- Dominitz, J., van Soest, A., 2008. survey data, analysis of, in: Durlauf, S.N., Blume, L.E. (Eds.), *The New Palgrave Dictionary of Economics*. Second Edition. Online. Palgrave Macmillan.
- Easterlin, R.A., 1974. Does Economic Growth Improve the Human Lot? Some Empirical Evidence, in: David, P.A., Reder, M.W. (Eds.), *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*. New York / London, pp. 89--125.
- Frey, B.S., Stutzer, A. 2002. What Can Economists Learn from Happiness Research? *Journal of Economic Literature* 40, 402--435.
- Gruber, J.H., Mullainathan, S. 2005. Do Cigarette Taxes Make Smokers Happier. *Advances in Economic Analysis & Policy* 5, Article 4.
- Gasper, D., 2004. Human well-being: Concepts and conceptualizations. Institute of Social Studies, Working Series Paper, No. 388.
- Gasper, D., 2007. What is the capability approach? Its core, rationale, partners and dangers. *Journal of Socio-Economics* 36, 335--359.

- Gaspar, D., Cameron, J., 2000. Amartya Sen on inequality, human well-being, and development as freedom. *Journal of International Development* 12, 985--988.
- Griffin, J., 1987. *Well-Being: Its Meaning, Measurement, and Moral Importance*. Oxford University Press.
- Hausman, D.M., McPherson, M.S., 2006. *Economic Analysis, moral Philosophy, and Public Policy*. Second edition, 1996. Cambridge.
- Jackson, W., 2005. Capabilities, culture and social structure. *Review of Social Economy* 63, 101--124.
- Kahneman, D., 1999. Objective Happiness., in: Kahneman, D., Diener, E., Schwarz, N. (Eds.), *Well-being: The Foundations of Hedonic Psychology*. New York, pp. 3--25.
- Kahneman, D., Krueger, A.B., 2006. Developments in the Measurement of Subjective Well-Being. *Journal of Economic Perspectives* 20, 3--24.
- Kahneman, D., Wakker, P., Sarin, R., 1997. Back to Bentham? Explorations of Experienced Utility. *Quarterly Journal of Economics* 112, 375--405.
- Kahneman, D., Diener, E., Schwarz, N., eds., 1999. *Well-Being: The Foundations of Hedonic Psychology*. New York.
- Kaufman, A., 2006. Symposium on capabilities and freedom. *Journal of Political Philosophy* 14, 289--300.
- Krueger, A.B., Schkade, D.A., 2008. The reliability of subjective well-being measures. *Journal of Public Economics* 92, 1833--1845.
- Kuklys, W., 2005. *Amartya Sen's Capability Approach. Theoretical Insights and Empirical Application*. Springer.
- Kuznets, S., 1934. National Income, 1929-1932. *73rd US Congress, 2d session, Senate document no. 124*.
- Luechinger, S., 2009. Valuing Air Quality Using the Life Satisfaction Approach. *Economic Journal* 119, 482--515
- Lyubomirsky, S., King, L., Diener, E., 2005. The Benefits of Frequent Positive Affect: Does Happiness Lead to Success? *Psychological Bulletin* 131, 803--855.

- Marin, S., Davis, J., 2008. Sen's capability approach appraised: Underspecification, operationalization, and overemphasized freedom? Working paper.
- Max--Neef, M., Elizalde, A., Hopenhayn, M., 1989. Human scale development. *Development Dialogue*, 1, 4-126.
- Nettle, D., 2005. *Happiness: The science behind your smile*. Oxford / New York.
- Nussbaum, M., 2000. *Women and Human Development*. Cambridge.
- Peter, F., 2003. Gender and the foundations of social choice: the role of situated agency. *Feminist Economics* 9, 13--32.
- Pogge, T., 2002. Can the capability approach be justified? Working Paper.
- Rabin, M., 1998. Psychology and Economics. *Journal of Economic Literature* 36, 11--46.
- Rawls, J., 2001. *Justice as Fairness. A Restatement*. Harvard University Press.
- Robeyns, I., 2000. An unworkable idea or a promising alternative? Sen's capability approach re-examined. University of Leuven Working Paper.
- Robeyns, I., 2002. In defence of Amartya Sen. *Post-Autistic Economics Review*, 17, article 5.
- Robeyns, I., 2003. Sen's capability approach and gender inequality: Selecting relevant capabilities. *Feminist Economics* 9, 61--92.
- Robeyns, I., 2005. The capability approach: A theoretical survey. *Journal of Human Development* 6, 93--114.
- Robeyns, I., 2006. The capability approach in practice. *Journal of Political Philosophy* 14, 351--376.
- Robeyns, I., Forthcoming. Capabilities and theories of social justice, in: Chiappero Martinetti, E. (Ed.), *Debating Global Society: Reach and Limit of the Capability Approach..*
- Sen, A., 1980. Equality of what? The Tanner Lecture on Human Values, reprinted in A. Sen, 1997, *Choice, Welfare and Measurement*, Harvard University Press, pp. 353--370.
- Sen, A., 1985a. *Commodities and Capabilities*. Oxford University Press.
- Sen, A., 1985b. Well-being, agency and freedom. *Journal of Philosophy* 82, 169--221.
- Sen, A., 1985c. Rationality and uncertainty. *Theory and Decision* 18, 109--127.
- Sen, A., 1987. *The Standard of Living*. Cambridge.



- Sen, A., 1993a. Capability and well-being, in: Nussbaum, M, Sen, A. (Eds), *The Quality of Life*. Oxford, pp. 30--53.
- Sen, A., 1993a. Positional objectivity, *Philosophy and Public Affairs*, reprinted in A. Sen, 2002, *Rationality and Freedom*, Harvard University Press, pp. 463—483.
- Sen, A., 1998. ‘The possibility of social choice’, essay delivered on the occasion of the award of the Alfred Nobel Memorial Prize in Economic Sciences, republished in A. Sen, 2002. *Rationality and Freedom*, Harvard University Press, pp. 65--118.
- Sen, A., 2004. Elements of a theory of human rights. *Philosophy and Public Affairs* 32, 315--356.
- Sen, A., 2006. Reason, freedom, and well-being, *Utilitas* 18, 80--96.
- Sen, A., 2008. The economics of happiness and capability, in: Bruni, L., Comim, F., Pugno, M. (Eds.), *Capabilities and Happiness*. Oxford, pp. 16--27 .
- Sirgy, M.J., A.C. Michalos, A.L. Ferriss, R.A. Easterlin, D. Patrick, W. Pavot., 2006. The Quality-of-Life (QOL) research movement: Past, present, and future. *Social Indicators Research* 76, 343--466.
- van Staveren, I., Gasper, D., 2003. Development as freedom—and as what else? *Feminist Economics* 9, 137--162.
- Stewart, F., 2005. Groups and capabilities. *Journal of Human Development* 6, 185--204.
- Sugden, R., 2008. Capability, happiness and opportunity, in: Bruni, L., Comim, F., Pugno, M. (Eds.), *Capabilities and Happiness*. Oxford, pp. 299--322 .
- UNDP (United Nations Development Programme), 1990. *Human Development Report. Concept and Measurement of Human Development*. Oxford.
- Veenhoven, R., 2000. The four qualities of life. Ordering concepts and measures of the good life. *Journal of Happiness Studies* 1, 1--39.
- Vries, de B., Petersen, A., 2009. Conceptualizing sustainable development: An assessment methodology connecting values, knowledge, worldviews and scenarios. *Ecological Economics*, forthcoming.